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| EXAMINER | |
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| HUSSAIN, IMAD | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/564,907 | FRANZ ET AL. | |
| | Examiner | Art Unit | |
| | IMAD HUSSAIN | 2451 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *26-28,30-33,35-40,42-46 and 48-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-28,30-33,35-40,42-46 and 48-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09 March 2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. Applicant's amendment dated 09 March 2009 has been received and made of record.

2. Claims 26, 39 and 57 have been amended. Claims 29 and 41 have been cancelled. New claims 58-61 have been added.

3. Claims 26-28, 30-33, 35-40, 42-46 and 48-61 are pending in Application 10/564907.

### *Response to Arguments*

4. Applicant's arguments filed 09 March 2009 have been fully considered but they are not persuasive.

Applicant argues that the cited references do not teach or suggest that the service creation environment (SCE) is "assigned to a service provider" and that "the storage arrangement is accessed by the service provider by its respective configuration system."

Examiner respectfully disagrees with Applicant's interpretation of the prior art. It is implicit in Bjornberg that the "user" in question is an agent of the service provider. As stated in the abstract, the user provides commands to "deactivate, activate, deploy, or delete application and data files." In Figure 4, the "user creates an new IVR application and related data files on the SCE". Clearly the "user" is an agent of the service provider. Moreover, as there are multiple SCEs depicted in Figure 2, the most reasonable

interpretation of the prior art is that such SCEs are indeed assigned to a service provider (such that one service provider cannot edit another service provider's information).

Applicant additionally argues that Tsirigotis does not teach or suggest "service provider specific caching times."

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, Tsirigotis teaches the use of a cache with origin server-specific caching times (as noted by Applicant). However, in the system of Tsirigotis, it is assumed that there is a one-to-one mapping between origin servers and service providers. Given that the system of Bjornberg-Campbell concerns a centralized storage ("origin") server for a plurality of service providers, it would be obvious to one of ordinary skill in the art to modify Bjornberg-Campbell with the cache of Tsirigotis such that the caching times would be service-provider specific rather than specific to the single intermediary SCF device [Tsirigotis: Paragraph 0054]. This is further evidenced by prior art US 2003/0187746 A1, which teaches that such caching arrangements are well-known and recognized as advantageous [2003/0187746 A1: Paragraphs 0037 and 0040].

### *Claim Objections*

5. Claims 26 and 39 are objected to because of the following informalities: the claims are replete with spelling and grammatical errors (e.g., "a configuration system assigned to a service provide**d**" in claim 39). Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**7. Claims 26, 29, 32, 34-41, 44, 49-50, 53, 54, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg et al. (US 6,389,126, hereinafter Bjornberg and incorporated reference US 6,427,002, hereinafter Campbell) in view of Panaglotis Tsirigotis et al (US 2003/0115420 A1, hereinafter *Tsirigotis*).**

Regarding claim 26, Bjornberg discloses a *storage arrangement for a service provider triggerable provision of components for an information output or interactive dialog that is generated by an information output system or an interactive system* [Bjornberg: Abstract, "provisioning a network of advanced interactive voice response (IVR) service platforms"], *comprising:*

*-a supply device* ["provisioning system"] *accessible by the service providers for changed or new components of information outputs or interactive dialogs* [Bjornberg: Column 5 Lines 29-31]*;*

*-and at least one provision device* ["NGSN" (Next Generation Service Node)] *to which changed or new components of information outputs or interactive dialogs are transmitted by the supply device* [Bjornberg: Column 5 Lines 29-31],

*-wherein at least one information output device* [Campbell: Column 4 Lines 22-25, "voice ports" and Figure 3 element 302] *is provided and associated with the information output system or interactive system* [Campbell: Column 4 Lines 22-25, "first functional layer of NGSN" and figure 4 element 304] *and accesses at least one provision device for information outputs or interactive dialogs* [Campbell: Figure 3 element 308 and Column 6 Lines 50-57],

*-a configuration system* ["Service Creation Environment (SCE)", User Interface (204)] *for generating and changing components, the configuration system is assigned to a service provider* ["IVR customer"] [Bjornberg: Column 5 Lines 26-29 and Column 6 Lines 31-35] *and transmits new or changed components to the supply device* [Bjornberg: Column 5 Lines 29-31],

*-the storage arrangement is accessed by the service provider by its respective configuration system* [Bjornberg: Figure 2, "SCE"].

Bjornberg does not explicitly disclose that *at least one information output device has a caching function for components for an information output or interactive dialog with service provider specific caching times*.

However, Tsirigotis teaches a caching system with a caching function for components with service provider specific caching times [Tsirigotis: Paragraph 0054 "assign an expiration date based on characteristics of the… origin server"].

Bjornberg and Tsirigotis are analogous art in the same field of endeavor as both deal with networked accessible shared storage devices.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the caching scheme of Tsirigotis for caching content in the system of Bjornberg. One of ordinary skill in the art would have been motivated to modify the system of Bjornberg with the caching scheme of Tsirigotis because in doing so, the system would allow for more efficient data access [Tsirigotis: Paragraph 0006]

Regarding claim 32, the combination of Bjornberg and Tsirigotis (hereinafter *Bjornberg-Tsirigotis*) teaches that a *configuration system* ["Service Creation Environment (SCE)", SCE Interface (512)] *is provided for generating and changing components and is assigned to the operator* ["IVR Service Provider"] *of the arrangement* [Bjornberg: Column 6 Lines 22-26 and 34-36 (operator specific files and content manager functions are accessible only via this interface, therefor such a device must be assigned to the operator)] *and from which new or changed components are transmitted to the supply device* [Bjornberg: Column 5 Lines 29-31].

Regarding claim 35, Bjornberg-Tsirigotis teaches that *the supply device* ["provisioning system"] *is implemented on a hardware platform separate from the provision devices*

["NGSN"] [Bjornberg: Figure 2, wherein the devices communicate over a TCP/IP network].

Regarding claim 36, Bjornberg-Tsirigotis teaches that *a plurality of provision devices* [Bjornberg: Figure 2, wherein multiple NGSN nodes are shown] *of the information output system or interactive systems to which components are transmitted* [Bjornberg: Column 6 Lines 18-21 and Column 9 Lines 44-57] *by the supply device* ["provisioning system"] *are provided*.

Regarding claim 37, Bjornberg-Tsirigotis teaches that the supply device is implemented together with a provision device on a common hardware platform [Bjornberg: Column 13 Lines 20-26 states that all components can be implemented as software on a single platform].

Regarding claim 38, Bjornberg-Tsirigotis teaches that *the supply device* ["provisioning system"] *is duplicated* [Bjornberg: Column 5 Lines 15-17].

Regarding claim 39, Bjornberg teaches *a method for providing components for newly generated or changed information outputs or interactive dialogs by a storage arrangement* [Bjornberg: Abstract]*, comprising:*

*-providing a supply device* [Bjornberg: Column 5 Lines 31-37, "provisioning system"]*;*

*-providing at least one provision device* [Bjornberg: Column 5 Lines 31-37, "NGSN"]*;*

*-transmitting a new or changed component of an information output or interactive dialog to the supply device that is automatically transmitted by the supply device to at least one provision device of the arrangement* [Bjornberg: Column 5 Lines 29-31]*;*

*-transmitting the new or changed component from the at least one provision device* [Campbell: Figure 3 element 308] *to an information output device* [Campbell: Column 4 Lines 22-25, "voice ports" and Figure 3 element 302]*;*

*-transmitting a new or changed components to the supply device* [Bjornberg: Column 5 Lines 29-31] *by a configuration system* ["Service Creation Environment (SCE)", User Interface (204)] *assigned to a service provider* ["IVR customer"] [Bjornberg: Column 5 Lines 26-29 and Column 6 Lines 31-35]*;*

*-accessing the storage arrangement by the service provider via respective configuration system* [Bjornberg: Figure 2, "SCE"].

Bjornberg does not explicitly disclose that said transmission is by *a caching function for components for an information output or interactive dialog with service provider specific caching times*.

However, Tsirigotis teaches a caching system with *a caching function for components with service provider specific caching times* [Tsirigotis: Paragraph 0054 "assign an expiration date based on characteristics of the… origin server"].

Bjornberg and Tsirigotis are analogous art in the same field of endeavor as both deal with networked accessible shared storage devices.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the caching scheme of Tsirigotis for caching content in the system of Bjornberg. One of ordinary skill in the art would have been motivated to modify the system of Bjornberg with the caching scheme of Tsirigotis because in doing so, the system would allow for more efficient data access [Tsirigotis: Paragraph 0006]

Regarding claim 40, Bjornberg-Tsirigotis teaches that *information in the supply device is specifiable by a service provider thereby controlling the time of activation of a new or changed component for a service* [Bjornberg: Column 6 Lines 59-62 and Table 1; the time of activation is when the service provider chooses to activate the component].

Regarding claim 44, the claim comprises substantially the same limitations as claims 39 and 32. The same rationale for rejection is applicable.

Regarding claim 49, Bjornberg-Tsirigotis teaches that *a plurality of components are constituted by coded or to be encoded elements of an information output or formation rules for information outputs or interactive dialogs* [Campbell: Figure 4 and Column 6 Lines 2-8].

Regarding claim 50, Bjornberg-Tsirigotis teaches that *the information output relates to an output of voice information, video information or audio information* [Bjornberg: Column 4 Lines 7-11].

Regarding claim 53, Bjornberg-Tsirigotis teaches that *an information output device* [Campbell Figure 3 Element 302] *accesses a provision device* [Campbell: Figure 3 Element 308] *in the course of an information output or interactive dialog for component transmission* [Campbell: Column 6 Lines 48-65].

Regarding claims 54 and 56, Bjornberg-Tsirigotis teaches that *the service provider has the option of adapting the service provider specific caching times* [Tsirigotis: Paragraph 0054].

Regarding claims 58 and 59, Bjornberg-Tsirigotis teaches that *the at least one information output device is an IVR server* [Campbell: the "voice ports" and "SIVR ports" are part of an IVR node, Figures 2 and 3].

**8. Claims 27-28, 30-31 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg and Tsirigotis in view of Fuller et al. (US 2003/0055972 A1, hereinafter Fuller).**

Regarding claim 27, Bjornberg-Tsirigotis teaches that *the supply device comprises a storage area for components assigned to the service providers and a storage area for*

*components assigned to the operator of the information output system or interactive system*

Bjornberg-Tsirigotis does not explicitly disclose that *the service providers have no access to components assigned to the operator of the information output system or interactive system*.

However, Fuller teaches that "each customer has access only to the logical storage areas associated with the customer and cannot access the logical storage area of any other customer" [Fuller: Abstract].

Bjornberg-Tsirigotis and Fuller are analogous art in the same field of endeavor as both deal with networked accessible shared storage devices.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the storage assignment scheme of Fuller for access control in the system of Bjornberg-Tsirigotis. One of ordinary skill in the art would have been motivated to modify the system of Bjornberg-Tsirigotis with the storage assignment scheme of Fuller because in doing so, the system would allow for maintaining information security while cutting costs by sharing physical resources [Fuller: Paragraph 0008].

Regarding claim 28, Bjornberg-Fuller teaches that *the service providers are authenticated* [Fuller: Paragraph 0032] *and, on the supply device, only have access to components or storage areas assigned to the relevant authorized service provider* [Fuller: Abstract].

Regarding claim 30, Bjornberg-Fuller teaches that *a firewall is disposed between the supply device* ["network operations center"] *and the configuration systems* ["POD"] *and is assigned to the service providers or a computer platform used by a service provider* ["customer"] *to access the supply device* [Fuller: Figure 6 and Paragraph 0051].

Regarding claim 31, Bjornberg-Fuller teaches that *an access authorization is created for the transmission of components by service providers to the supply device* [Fuller: Paragraph 0043, "port controller 255 may perform authentication and authorization [and] enables an associated port of a customer during a data transfer…", and Paragraph 0063].

Regarding claim 42, the claim comprises substantially the same limitations as claim 39 as discussed above and claim 28. The same rationale for rejection is applicable.

Regarding claim 43, Bjornberg-Fuller teaches that *components changed or newly generated by a service provider are stored in a storage area of the supply device* [Bjornberg: Column 6 Lines 28-31] *assigned to the service provider* [Fuller: Abstract].

**9. Claims 33, 45-48, 55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg and Tsirigotis in view of Tegan et al. (US 6,831,966, hereinafter Tegan).**

Regarding claim 33, Bjornberg-Tsirigotis does not explicitly disclose that a charging server is provided to which charging information is transmitted by the supply device.

However, Tegan teaches a method for charging users based on information transmitted by a supply device [Tegan: Column 4 Lines 5-8].

Bjornberg-Tsirigotis and Tegan are analogous art in the same field of endeavor as both deal with the provisioning of IVR systems and using functions thereof.
It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the charging scheme of Tegan for charging service providers based on usage in the system of Bjornberg-Tsirigotis. One of ordinary skill in the art would have been motivated to modify the system of Bjornberg-Tsirigotis with the charging scheme of Tegan because in doing so, the system would allow for generating income to cover the expenses of running a IVR system [Tegan: Column 3 Lines 57-61 and Column 4 Lines 5-8].

Regarding claim 45, Bjornberg-Tsirigotis-Tegan *teaches that the modification or creation of a component by a service provider* [Bjornberg: Column 5 Lines 26-29 and Table 1] *is charged* [Tegan: Column 4 Lines 5-8].

Regarding claim 46, the claim comprises substantially the same limitations as claim 39 as discussed above and claim 33. The same rationale for rejection is applicable.

Regarding claim 48, Bjornberg-Tsirigotis-Tegan teaches that *the information output device composes an information output or an output forming part of an interactive dialog from or by means of components* [Campbell: Figure 4 and Column 6 Lines 2-8].

Regarding claims 55 and 57, Bjornberg-Tsirigotis-Tegan teaches that *changing the service provider specific caching times* [Tsirigotis: Paragraph 0054] *affects the charging of the service provider* [Tegan: Column 4 Lines 5-8].

**10. Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg and Tsirigotis in view of Chow et al. (US 6029175, hereinafter *Chow*).**

Regarding claim 51, Bjornberg-Tsirigotis teaches the arrangement claim 26, *wherein when executing the corresponding service, the information output device accesses the components or elements held in the provision device* [Campbell: Figure 3 elements 302 and 308 and Column 6 Lines 50-57].

Bjornberg-Tsirigotis does not explicitly disclose that *the change in the content of a recorded message or interactive dialog is signaled to the information output device, and only the fact of a change is communicated*.

However, Chow teaches *the change in the content is signaled to the device, and only the fact of a change is communicated* [Chow: Claim 49 Preamble].

Bjornberg-Tsirigotis and Chow are analogous art in the same field of endeavor as both describe network communication systems. It would have been obvious for one of ordinary skill in the art at the time the invention was made to utilize the change-only scheme of Chow for transmitting only the notification of changes in components in the communication system of Bjornberg-Tsirigotis. One of ordinary skill in the art would have been motivated to modify the communication system of Bjornberg-Tsirigotis with the change-only scheme of Chow because in doing so, the system would allow for transmitting smaller files.

Regarding claim 52, Bjornberg-Tsirigotis teaches the method of claim 39, *wherein when executing the corresponding service, the information output device accesses the components or elements held in the provision device* [Campbell: Figure 3 element 308 and Column 6 Lines 50-57].

Bjornberg-Tsirigotis does not explicitly disclose that *the change in the content of a recorded message or interactive dialog is signaled to the information output device, and only the fact of a change is communicated*.

However, Chow teaches *the change in the content is signaled to the device, and only the fact of a change is communicated* [Chow: Claim 49 Preamble].

Bjornberg-Tsirigotis and Chow are analogous art in the same field of endeavor as both describe network communication systems. It would have been obvious for one of ordinary skill in the art at the time the invention was made to utilize the change-only scheme of Chow for transmitting only notification of the changes in components in the

communication system of Bjornberg-Tsirigotis. One of ordinary skill in the art would have been motivated to modify the communication system of Bjornberg-Tsirigotis with the change-only scheme of Chow because in doing so, the system would allow for transmitting smaller files.

**11. Claims 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg and Tsirigotis in view of Sandy Chai-Jen Wang et al. (US 2004/0225499 A1, hereinafter *Wang*).**

Regarding claims 60 and 61, Bjornberg-Tsirigotis teaches the arrangement and method of claims 26 and 39.

Bjornberg-Tsirigotis does not explicitly disclose that *the components for an information output or interactive dialog contain at least one of VoiceXML files, grammars, and precoded video fragments*.

However, Wang teaches that the standard components for IVR systems are *VoiceXML files and grammars* [Wang: Paragraph 0026].

It would be obvious to one of ordinary skill in the art at the time the invention was made to use the VoiceXML files and grammars of Wang in the IVR system of Bjornberg-Tsirigotis. In doing so, the system would be made to conform to well-known standards and programming methods for such systems, allowing for greater interoperability and ease of design.

**12. Claims 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg and Tsirigotis in view of Robert Van Kommer (US 2001/0055370 A1, hereinafter *Kommer*).**

Regarding claims 60 and 61, Bjornberg-Tsirigotis teaches the arrangement and method of claims 26 and 39.

Bjornberg-Tsirigotis does not explicitly disclose that *the components for an information output or interactive dialog contain at least one of VoiceXML files, grammars, and precoded video fragments*.

However, Kommer teaches that the standard components for IVR systems are *VoiceXML files* [Kommer: Paragraph 0033].

It would be obvious to one of ordinary skill in the art at the time the invention was made to use the VoiceXML files of Kommer in the IVR system of Bjornberg-Tsirigotis. In doing so, the system would be made to conform to well-known standards and programming methods for such systems, allowing for greater interoperability and ease of design.

## ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-3628. The examiner can normally be reached on Monday through Friday from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2451

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